

DOCKET NO. SC11507ZC

Please amend the subject application as follows:

IN THE SPECIFICATION:

Add a heading to the first paragraph on page 1, lines 4 and 5 as follows:

TECHNICAL FIELD OF THE INVENTION

A1
This invention is related, in general, to signal conversion and, more specifically, to circuitry for signal conversion using an Automatic Frequency Control (AFC) signal.

Add a heading to the second paragraph on page 1, lines 6-11 as follows:

BACKGROUND OF THE INVENTION

A2
Portable communication products require circuits that can perform well in a low power environment. A reduction of power supply voltages allows for fewer battery cells, reducing the size and weight of the portable equipment. However, the lower power constraint adversely affects the performance of the standard RF circuitry. Circuits are needed that can achieve the design goals for noise figure, linearity and power consumption for portable communications products.

Amend the paragraph beginning at page 8, line 16 and continuing to page 9, line 3 as follows:

A3
cont
The AFC output signal in integrated demodulator tuning circuit 60 is enabled by a logic high signal for the signal ENABLE that is supplied at input terminal 68. When enabled, the output voltage at terminal 48 is a function of the difference in input currents supplied at terminals 12 and 46. A logic low signal, on the other hand, disables the AFC output signal. Specifically, a logic low signal supplied at input terminal 68 causes transistor 62 to be conductive, shutting off

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A3
Concl

the current mirror formed by transistors 24 and 26 and disabling the current path from input terminal 12 to output terminal 48. Further, a logic low signal supplied at input terminal 68 causes transistor 64 to also be conductive, shutting off the current mirror formed by transistors 32 and 34 and disabling the current path from input terminal 46 to output terminal 48. Thus, the logic low signal at input terminal 68 switches the AFC signal off and the output current at terminal 48 does not respond to changes in the differential input current supplied at terminals 12 and 46. The AFC signal supplied by integrated demodulator tuning circuit 60 is used for setting a voltage on a tuning capacitor in filter 88 (see FIG. 1) that controls an oscillator frequency generated in a demodulator. While the AFC signal supplied from terminal 48 is switched off, charge is held on the tuning capacitor and the frequency of the oscillator in the demodulator is preserved.
